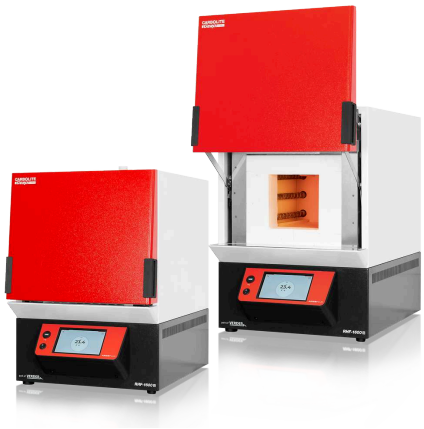
part of VERDER
© Carbolite Gero Limited - www.carbolite.com
Content may be subject to modifications or corrections

HIGH TEMPERATURE LABORATORY FURNACE - RHF

The RHF range of silicon carbide heated high temperature chamber furnaces comprises four chamber sizes, each available with three maximum operating temperatures of 1400 °C, 1500 °C and 1600 °C. Robust construction and high quality elements provide rapid heating rates (typically reaching 1400 °C in under 40 minutes) and a long reliable working life.

STANDARD FEATURES



- 1400°C, 1500°C or 1600°C maximum operating temperature
- Programmable EPC3016P1 controller
- 3, 8, 15 or 35 litre chamber volumes
- Vertical lift door keeps heated surface away from the user
- Soft closing door (3 & 8 litre models only) protects the thermal insulation
- Silicon carbide heating elements provide long life and are able to withstand the stresses of intermittent operation
- RHF 3 & 8 litre have a cast alumina hearth; RHF 15 & 35 have silicon carbide hearth
- Low thermal mass insulation for high energy efficiency

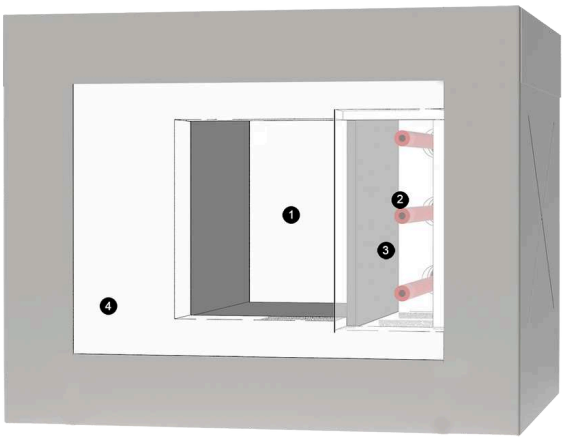
OPTIONS (*SPECIFY THESE AT TIME OF ORDER*)

- A range of sophisticated digital controllers, multisegment programmers and data loggers with digital communication options is available - more information about controllers
- Over-temperature protection (recommended to protect valuable contents & for unattended operation)
- Heating element protection tiles

© Carbolite Gero Limited - www.carbolite.com
Content may be subject to modifications or corrections

RHF CHAMBER WITH SIC PROTECTION TILES

1. Working chamber
2. Heating Elements
3. SiC protection tiles
4. Thermal insulation

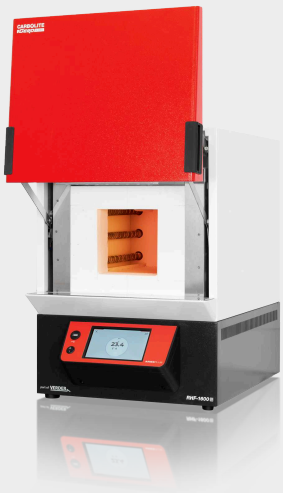


Layout diagram

HIGH TEMPERATURE LABORATORY FURNACE - RHF

EXAMPLES

RHF 16/8



RHF 16/8

© Carbolite Gero Limited - www.carbolite.com
Content may be subject to modifications or corrections

TECHNICAL DATA

© Carbolite Gero Limited - www.carbolite.com
Content may be subject to modifications or corrections

TECHNICAL DETAILS (MODELS)

	RHF 14/3	RHF 14/8	RHF 14/15
Max temp (°C)	1400	1400	1400
Heat-up time (mins)	33	22	35
Dimensions: Internal H x W x D (mm)	120 x 120 x 205	170 x 170 x 270	220 x 220 x 310
Dimensions: External H x W x D (mm) H (door open)	670 x 435 x 608 (915)	715 x 505 x 680 (1000)	810 x 690 x 780 (1105)
Configuration	Bench-top	Bench-top	Bench-top
Volume (litres)	3	8	15
Max power (W)	4500	8000	10000
Holding power (W)	1900	3200	2900
Thermocouple type	R	R	R
Weight (kg)	42	64	125
Power supply required per phase	Single phase 200-240V 30A, 380-415V 2 phase 15A	Single phase 200-240V 50A, 380-415V 2 phase + N 25A	380-415V 3 phase + N 22A, 200-220V 3 phase delta 38A

© Carbolite Gero Limited - www.carbolite.com
Content may be subject to modifications or corrections

	RHF 14/35	RHF 15/3	RHF 15/8
Max temp (°C)	1400	1500	1500
Heat-up time (mins)	38	45	40
Dimensions: Internal H x W x D (mm)	250 x 300 x 465	120 x 120 x 205	170 x 170 x 270
Dimensions: External H x W x D (mm) H (door open)	885 x 780 x 945 (1245)	670 x 435 x 608 (1000)	715 x 505 x 680 (1000)
Configuration	Bench-top	Bench-top	Bench-top
Volume (litres)	35	3	8
Max power (W)	16000	4500	8000
Holding power (W)	6000	2000	3500
Thermocouple type	R	R	R
Weight (kg)	179	46	61
Power supply required per phase	380-415 3 phase + N 35A, 200-220V 3 phase delta 60A, 440-480V 3 phase no N 35A	220-240V single phase 36A, 380-415V, 2 phasse + N, 18A	200-220 3 phase delta 30A, 200-208V 3 phase + delta 38A, 380-415V 3 phase delta 17.5A

© Carbolite Gero Limited - www.carbolite.com
Content may be subject to modifications or corrections

	RHF 15/15	RHF 15/35	RHF 16/3
Max temp (°C)	1500	1500	1600
Heat-up time (mins)	46	46	42
Dimensions: Internal H x W x D (mm)	220 x 220 x 310	250 x 300 x 465	120 x 120 x 205
Dimensions: External H x W x D (mm) H (door open)	810 x 690 x 780 (1105)	885 x 780 x 945 (1245)	655 x 435 x 610 (905)
Configuration	Bench-top	Bench-top	Bench-top
Volume (litres)	15	35	3
Max power (W)	10000	16000	4500
Holding power (W)	3000	6200	2300
Thermocouple type	R	R	R
Weight (kg)	125	178	42
Power supply required per phase	380-415V 3 phase + N 25A, 230-240V 3 phase delta 43A,	380 - 415 3 phase + N 35A, 440-480V 3 phase no N 60A, 380-415V 3 phase no N 35A, 440-480 3 phase + N 35A	200-240V single phase 36A, 380-415V 2 phase + N 18A, 200-240V 3 phase delta 30A

© Carbolite Gero Limited - www.carbolite.com
Content may be subject to modifications or corrections

	RHF 16/8	RHF 16/15	RHF 16/35
Max temp (°C)	1600	1600	1600
Heat-up time (mins)	35	58	113
Dimensions: Internal H x W x D (mm)	170 x 170 x 270	220 x 220 x 310	250 x 300 x 465
Dimensions: External H x W x D (mm) H (door open)	705 x 505 x 675 (990)	810 x 690 x 780 (1105)	1530 x 900 x 1020 (1885)
Configuration	Bench-top	Bench-top	Floor-standing
Volume (litres)	8	15	35
Max power (W)	8000	10000	16000
Holding power (W)	4000	3500	7000
Thermocouple type	R	R	R
Weight (kg)	61	140	270
Power supply required per phase	380-415V 3 phase + N 18A, 220-240V 3 phase delta 29A, 200-208V 3 phase delta 34A, 380-415V 3 phase no N 18A, 440-480V 3 phase no N 18A	380-415V 3 phase + N 25A, 200-240V 3 phase delta 42A, 440-480V 3 phase + N 25A	380-415V 3 phase + N 40A, 220-240V 3 phase delta 62A, 380-415 3 phase no N 37A, 440-480V 3 phase + N 40A

Please note

- Maximum continuous operating temperature is 100°C below maximum temperature
- Heat up rate is measured to 100°C below maximum, using an empty chamber
- Holding power is measured at continuous operating temperature

www.carbolite.com/rhf

© Carbolite Gero Limited - www.carbolite.com
Content may be subject to modifications or corrections